

## **CHAPTER 6**

### **SUMMARY AND CONCLUSION**

#### **6.1 INTRODUCTION**

This final chapter of the paper will be divided into five sections. These are (i) Overview of the study; (ii) Interpretation of major findings; (iii) Contributions of the study; (iv) Limitations of the study; and (v) Recommendation for future research

#### **6.2 OVERVIEW OF THE STUDY**

The main objective of the study is to compare the quarterly returns of MGS, bonds and stocks listed on KLSE and to determine if alternative investment strategies involving both bonds and stocks can improve investment performance. Ancillary objectives include the comparison of returns on various categories of bonds and, an examination of the legal and regulatory framework of the bond market in Malaysia to determine if current guidelines and practices can be improved upon.

The study covers 35 quarters starting from March quarter of 1987. The quarterly returns on non-convertible bonds and loan stocks listed on KLSE during this period are compared with returns on the KLSE

Composite Index and the yields to maturity on the latest issue of long-term MGS. The bond returns are arrived at by forming a market portfolio of all non-convertible bonds, where the relative proportion of each bond in the portfolio is dependent on its market value relative to the total market value of all bonds. The total return on each particular bond is determined by adding its capital gains yield to its dividend yield (if any) for the quarter. Afterwards a bond portfolio for convertibles and all-bonds (convertibles and non-convertibles) are formed and their returns are determined similarly.

The KLSE Composite Index is an index of 100 stocks listed on KLSE in which every sector is represented. The C1 returns is determined by expressing the change in a particular quarter as a percentage of the opening level of the index.

The promised quarterly yields on long-term MGS are determined by finding the semi-annual return that equates the "indicative middle price" (as report by Investors Digest) to the present value of the cash payments promised by the security. The quarterly yield is the effective yield implied in the semi-annual yield.

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The returns on all the various categories of bonds are compared with yields on MGS and stock returns. Correlations between the returns are calculated to determine if diversification can be useful.

The second part of the studies looks at the problems and prospects of the market. More emphasis has been laid on the problems not because it has more problems than prospects, but because the prospects will be brighter when problems are circumvented.

### **6.3 INTERPRETATION OF MAJOR FINDINGS**

Table 4.3 gives a summary of the returns of MGS, non-convertible bonds and the KLSE Composite Index. The findings reported on this table are consistent with the notion that higher returns can only be achieved by assuming higher risk. Also consistent with expectations is that MGS offer the lowest returns and the lowest risk, followed by corporate bonds and finally stocks. An important conclusion that is drawn from the table is that

non-convertible bonds offer higher returns compared with the level of risk involved. The correlation between non-convertible bonds and stocks is low.

Table 4.6 gives a summary of the returns and relationship between MGS, convertible bonds and KLSE Composite Index. These findings are also consistent with the fact that higher risk has to be assumed to obtain higher returns. However, convertible bonds returns are higher and more risky than common stocks and MGS returns. Again the latter offers the lowest returns. Risk-return relationships are almost equal, implying that both stocks and convertible bonds offer returns commensurate with the level of risk involved. Correlation between convertible bonds and stocks is almost 1 (one).

Table 4.8 is a summary of the returns on MGS, an all-bonds portfolio and KLSE Composite Index. Again securities offering higher returns are more risky than those offering lower return. Like convertible bonds, the all-bonds portfolio offers higher returns and risk than common stocks. All securities offer returns commensurate with the risk involved in them. Correlation between stocks and bonds is 0.51.

Table 4.11 is a summary of the returns of MGS, convertible and non-convertible bonds. Convertible bonds offer higher returns and are more risky than both non-convertible bonds and MGS. Again high return securities offer high risk. The correlation between returns on convertible and non-convertible bonds is low. Again non-convertible bonds offer high returns for the risk level involved.

#### 6.3.1 IMPLICATIONS OF FINDINGS

What are the implication of the findings for bond portfolio managers? Firstly the prudent bond portfolio managers can make superior returns without having exposure to higher relative risk by investing in MGS and bonds (See Table 4.3).

Secondly, as shown by Tables 4.3 and 4.9, returns can be greatly improved and risk relatively unaffected, or in some cases even reduced, by a strategy of investing in both stocks and bonds. Investing in both convertible and non-convertible bonds also reduces risk while leaving returns relatively unaffected.

#### 6.4 CONTRIBUTION OF THE STUDY

The study provides empirical evidence of returns that can be earned from investments in stocks and bonds in the Malaysian capital market. In particular it has shown that returns on the bond market are very high compared with the returns on stocks. In fact, if the average quarterly returns is translated into an annual return it will be about 13.48% per annum for non-convertibles bonds, 32.92% for convertibles and 31.28% for all bonds. The 13.48% return is indeed quite high for the risk level involved. The main contribution of the study therefore, is to show that high returns and relatively low risk are involved in investing in non-convertible bonds. Now is a particularly convenient time to get into the bond market, earn the returns before everyone gets in, by which time prices will increase and returns reduced. An all-bonds investor can earn particularly high returns, but at high risk levels. In this case relative risk/return is almost equal that of common stocks.

These results are similar to a study conducted by Statman and Ushman and reported by Sharpe et al (1995).

In the latter study, it was reported that average quarterly excess returns of bonds are positive in America over the period 1926 -1985 and that the correlation between stocks and bond returns for the period is 0.30. However the time frame covered by that study was much longer than this one.

The study has also shown that bonds and stocks should not be regarded as competing forms of investment. Rather they should be regarded as complementary. The different categories of bonds should also be regarded as complementary.

#### **6.5 LIMITATIONS OF THE STUDY**

The time frame covered by the study is about nine years. This can be a relatively short investment horizon for equity investors who are more concerned with long term returns than gains obtainable in the short-run. Investment objectives with different investment horizons may lead to decisions between security types simply because some securities are more suitable for the time frame involved. For example, an investor having a time frame of two years may decide to invest in bonds rather

than in equity. The relationship reported by the study may change had the time horizon been shorter or longer.

The relationships reported are past relationships and may not be a good indication of future relationships. The seemingly attractive gains from bonds may diminish if many investors try to capture these gains. Concerted investor buying pressure usually leads to higher prices and lower returns.

MGS prices used in calculating their expected yields to maturity are 'indicative middle prices' and may differ from the last transacted market prices. If there is a significant difference between these two prices, then the yields reported do not represent market yields and hence are a distortion. More realistic yields would have been obtained by using the last transaction prices. Unfortunately these prices are not available.

Some of the prices used in calculating bond yields are the last transacted prices, not necessarily the market prices at the end of the quarters. Some bonds are not traded for long periods of time and hence the market value of the bonds are unknown. In the absence of up to



date prices, the best and most recent estimates of value are used. In this case, these estimates are the last transacted prices.

#### **6.6 SUGGESTIONS FOR FUTURE RESEARCH**

A good starting point in putting forward recommendation for future researchers is to find a way of circumventing the limitations of this study.

Unfortunately some of the limitations are due to data inavailability. The findings of this paper can be greatly improved if a suitable basis is found in determining how long a bond is allowed to be inactive before being eliminated from the bond portfolio. Such a criteria could be the same as that of the KLSE Composite Index.

Secondly, researchers can try and calculate actual returns obtainable by actually selling an MGS at the end of the quarter rather than holding it until it matures. Returns on the bond portfolio and KLSE are actual returns and should ideally be compared with actual returns on MGS.

Thirdly, researchers can identify more specific areas on the bond market and conduct research on these. Interesting areas could be the effect of ratings and ratings changes on price, the default rates on various categories of ratings over time, the sensitivity of bond prices to changes in interest rates etc.

Finally the period study can be extended or subdivided into shorter periods and relationships of bonds and stocks in each of these time frames investigated. In this case, it may be possible to find out which securities (bond or stock) are more suitable for various investment horizons.